Improving Blood Pressure Control in Northeast Texas

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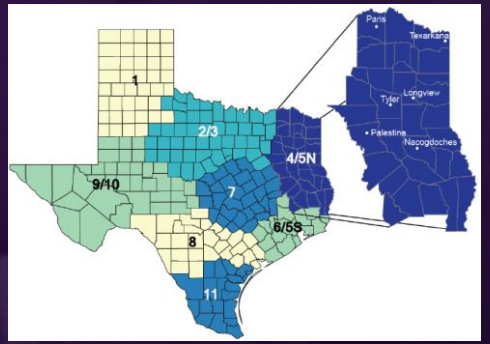

Your MISSION is Our MISSION

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Learning Objectives

At the end of the presentation learners are expected to be able to:

1) Recall three health factors and four health behaviors that contribute to cardiovascular disease and stroke

2) List three common barriers to improving blood pressure control

3) Describe the AMA/AHA national program for improving blood pressure control

4) List three methods for promoting healthy lifestyle changes

Cardiovascular Disease in the U.S.

AHA 2017 Statistical Update

American Heart Association 2020 Impact Goals

By 2020, to improve the cardiovascular health of all Americans by 20% while reducing deaths from cardiovascular diseases by 20%.

Life's Simple 7

3 Health Factors +
4 Health Behaviors

Designed to **measure** and promote CV health for an individual, and **monitor** CV health on for the population

http://bit.ly/2xpprB1

Manage Blood Pressure

Control Cholesterol

Reduce Blood Sugar

Increase Physical Activity

Eat a Healthy Diet

Lose weight

Stop Smoking

The Texas Plan to Reduce Cardiovascular Disease (CVD) and Stroke 2013-2017

- CVD and stroke are leading causes of death in Texas
- These chronic diseases are largely preventable through the reduction of modifiable risk factors
- Prevalence and CVD/stroke-related morbidity and mortality rates can be reduced by

1. Increased physical activity
2. Good nutrition
3. Tobacco cessation
4. Control of high blood pressure
5. High blood cholesterol
6. Diabetes Control
7. Reduction of overweight and obesity

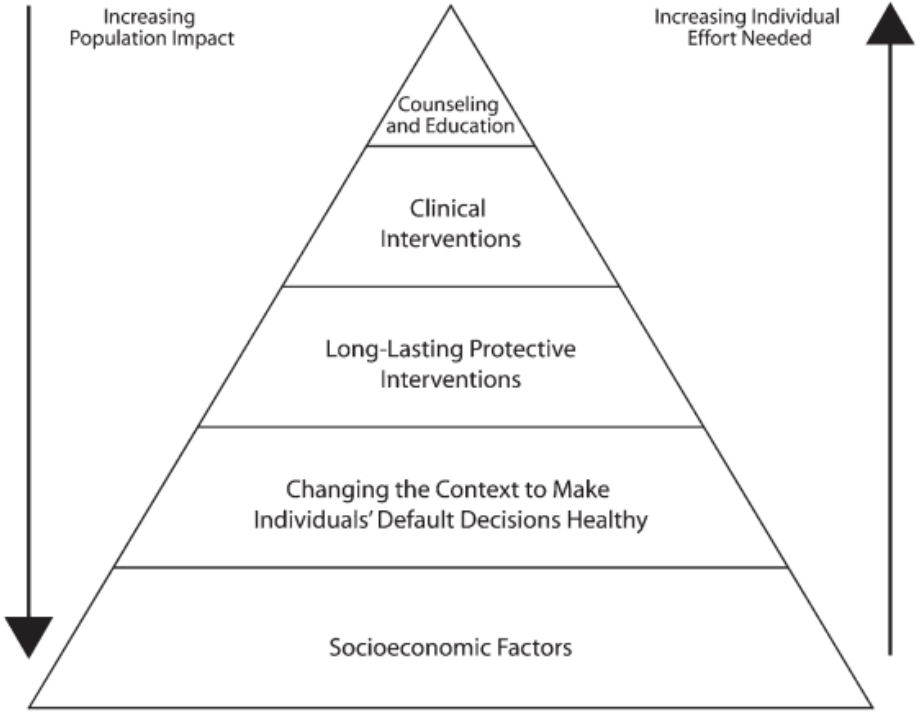
The Texas Plan to Reduce CVD and Stroke 2013 Goals

Outline a comprehensive strategy through four overarching focus areas:

1. Strategies that Support/Reinforce Healthy Behaviors
2. Community-Clinical Linkages Enhancements
3. Health Systems Interventions
4. Surveillance and Epidemiology

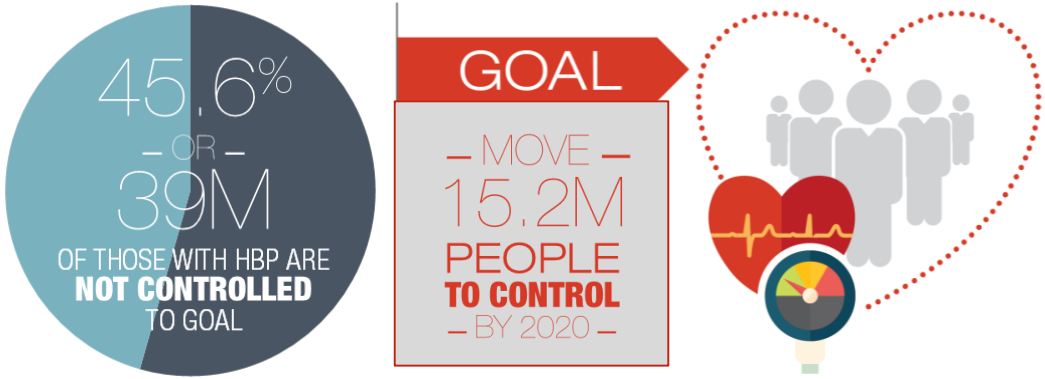
The Health Impact Pyramid

Success won't likely happen from interventions targeting individuals or clinicians alone



Thomas R. Frieden, MD, MPH A Framework for Public Health Action: The Health Impact Pyramid
American Journal of Public Health | April 2010, Vol 100, No. 4

AHA Goal for Blood Pressure Control



54.4% HBP is controlled

76% currently treated

84.1% are aware they have HBP

15.9% Remain undiagnosed

AHA 2016 Statistical Update

Barriers to improving blood pressure (BP) control

Patient / Socioeconomic Factors

Non-adherence to treatment (lifestyle and medication)

Failure to follow-up

Physician factors

Time crunched

Competing conditions

Awareness of evidence/ willingness to use

Disagreement with guidelines

Failure to recommend follow-up

System factors

Lack of team-based care

Lack of useful data / dashboards

Workflow problems

Buy-in (administration / leadership)

Lack of outreach / care coordination

The **2015 M.A.P. checklists** for improving BP control

Measure accurately

Screening checklist

When *screening* patients for high blood pressure:

- ☐ Use a validated, automated device to measure BP[1]
- ☐ Use the correct cuff size on a bare arm[2-10]
- ☐ Ensure patient is positioned correctly[2,3,11-19]

Confirmatory checklist

If screening blood pressure is ≥140/90 mm Hg, obtain a *confirmatory* measurement:

- ☐ Repeat *screening* steps above
- ☐ Ensure patient has an empty bladder[2,3,20]
- ☐ Ensure patient has rested quietly for at least five minutes[2,3,21,22]
- ☐ Obtain the average of at least three BP measurements[2,3,23]

Evidence-based tips for correct positioning

- Ensure patient is seated comfortably with:
- Back supported
- Arm supported
- Cuff at heart level
- Legs uncrossed
- Feet flat on the ground or supported by a foot stool
- No one talking during the measurement

Act rapidly

If a patient has blood pressure ≥140/90 mm Hg confirmed:

- ☐ Use evidence-based protocol to guide treatment[24-26]
- ☐ Re-assess patient every 2-4 weeks until BP is controlled[27-29]
- ☐ Whenever possible, prescribe single-pill combination therapy[30-32]

Evidence-based protocols typically include

- Counsel on and reinforce lifestyle modifications
- Ensure early follow-up and add preferred medications in a step-wise fashion, until BP is controlled
- For most patients, give preference to:
  - Thiazide diuretics
  - *Dihydropyridine* calcium channel blockers
  - ACE inhibitors (ACEI) or
  - Angiotensin receptor blockers (ARB)
- Do not prescribe both ACEI and ARB to same patient
- If BP ≥160/100 mm Hg, start therapy with two medications or a single pill combination

Partner with patients, families and communities

To empower patients to control their blood pressure:

- ☐ Engage patients using evidence-based communication strategies[33-35]
- ☐ Help patients accurately self-measure[36,37]
- ☐ Direct patients and families to resources that support medication adherence and healthy lifestyles

Evidence-based communication strategies include

- Begin with *open-ended questions* about adherence,including recent medication use
- *Explore* reasons for possible non-adherence or a single pill combination
- *Elicit* patient views on options and priorities to customize a care plan for each patient
- Remain *non-judgmental* at all times
- Use *teach-back* to ensure understanding of the care plan

Evidence-based tips for patient self-measurement of BP

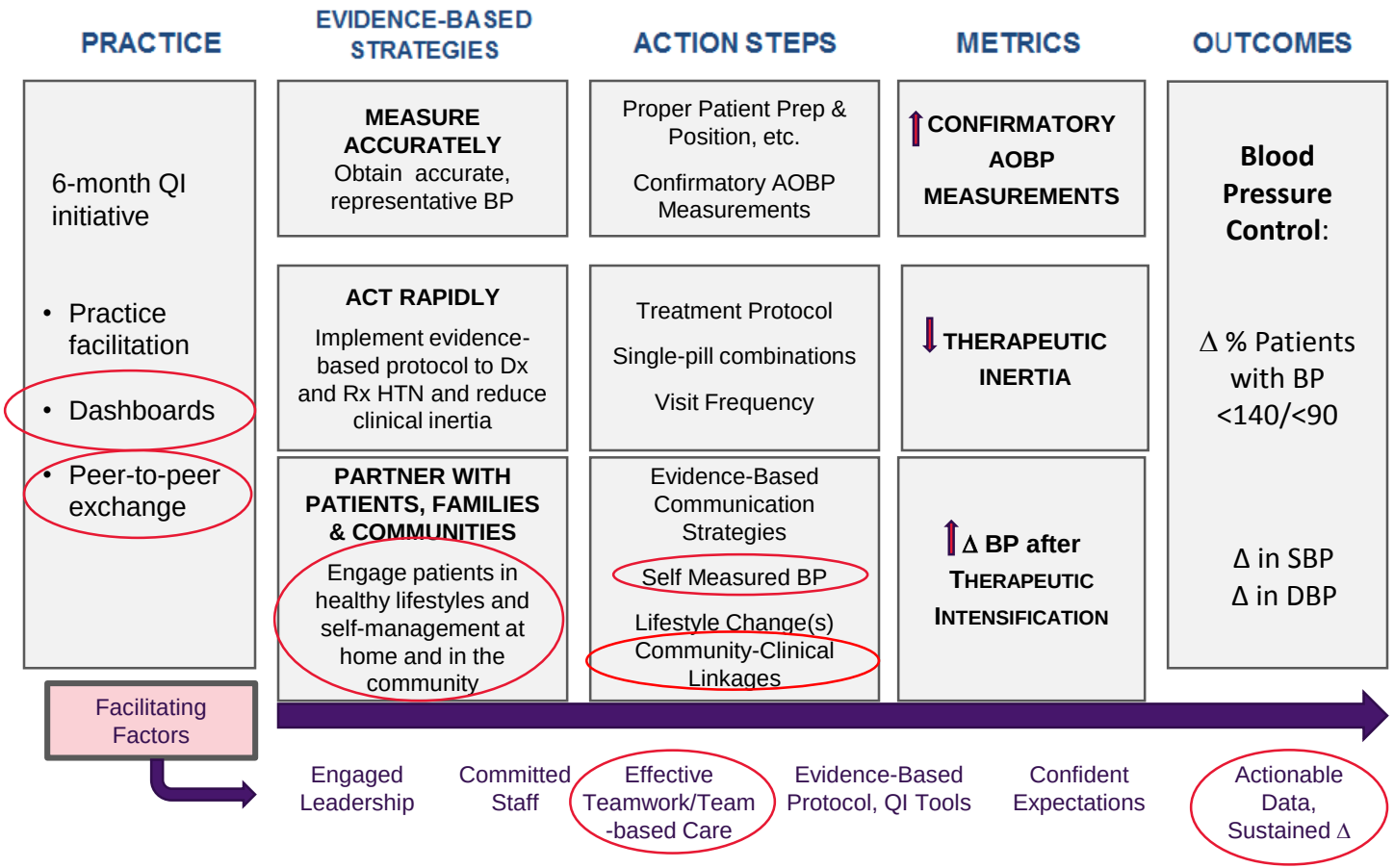
- Instruct patient to measure BP accurately using a validated, automated device and correct positioning for measurement
- Ask patient to record ≥2 morning BP measurements and ≥2 evening BP measurements for ≥ 4 consecutive days between office visits
- Develop a systematic approach to ensure patients can act rapidly to address elevated BP readings between office visits
- Counsel patients that self-measured BP ≥135/85 mm Hg is considered elevated

Evidence-based lifestyle changes to lower BP include

- Following the DASH diet, which is rich in fruits, vegetables and whole grains; low-fat dairy, poultry, fish and plant-based oils; and limits sodium, sweets, sugary drinks, red meat and saturated fats
- Engaging in moderate physical activity, such as brisk walking, for 40 minutes a day at least four days a week
- Maintaining a healthy body mass index (BMI)
- Limiting alcohol to ≤2 drinks/day in men, ≤1 drink/day in women

These checklists are not intended to be comprehensive. Additions and modifications to fit local practice are encouraged.

M.A.P. Hypertension Control Program



What is Target: BP?

- A call to action motivating healthcare professionals and patients to prioritize BP control
- Recognition for healthcare provider, clinical teams and healthcare systems that attain high levels of blood pressure control in their patient populations
- A source for tools and resources for healthcare professionals to use in practice

targetbp.org

TARGET: BP | American Heart Association. life is why | AMA American Medical Association

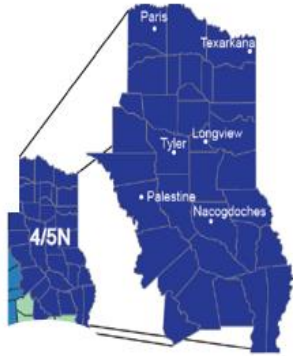
Expanding collaboration to prevent CVD

Improve BP	Improve Cholesterol	Improve Glucose
Target: BP *AMA/AHA	*AHA	*AMA

- Ongoing promotion of healthy diet, weight, physical activity and smoking cessation
- Ongoing promotion of evidence-based clinical guidelines, dashboards, and tools
- Expanding work around self-management
- Expanding development of community clinical linkages
- Creating a large network/repository to provide data to clinicians, health centers, health systems and patients - and to learn from analyzing data from these entities

Health Service Region 4/5N - Northeast Texas

Age-adjusted mortality rates in Northeast Texas are higher than in Texas overall for Heart Disease, Stroke, Lung Cancer, COPD, and Kidney Disease



If Northeast Texas were a State it would rank

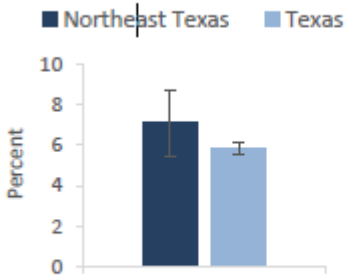
- 49th in heart disease mortality (33% higher age adjusted mortality rate than Texas overall)
- 51st in stroke mortality
- 45th in all-cause mortality (Texas ranks 31st for all cause mortality)

Determinants of Health Disparities in Northeast Texas

- 1.5 million people, over half of whom live in a rural area
- Every County in Northeast Texas has a median household income below that of Texas
- College graduate rates are substantially lower (17% compared to 27% in the Texas)

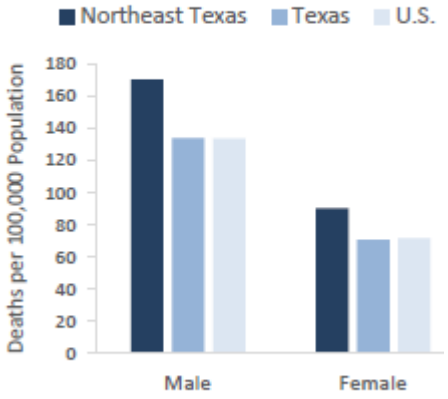
Prevalence and age-adjusted mortality rates of heart disease by gender and race in northeast Texas

Figure 18. Heart Disease Prevalence: Northeast Texas and Texas (2014)



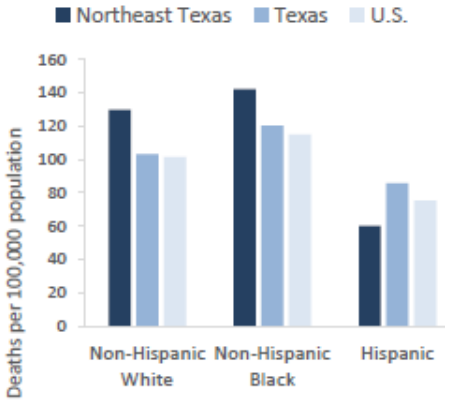
Data source: Behavioral Risk Factor Surveillance System (BRFSS), Center for Health Statistics, Texas Department of State Health Services. Error bars indicate 95% confidence intervals

Figure 19. Age-Adjusted Coronary Heart Disease Mortality Rates by Gender: Northeast Texas, Texas and U.S. (2014)



Data source: National Center for Health Statistics on CDC WONDER database. ICD10 codes: I20-I25

Figure 20. Age-Adjusted Coronary Heart Disease Mortality Rates by Race/Ethnicity: Northeast Texas, Texas and U.S. (2014)

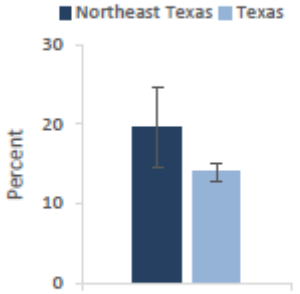


Data source: National Center for Health Statistics on CDC WONDER database. ICD10 codes: I20-I25

Leading Modifiable Health Risk Factors for NE Texas

Daily Smoking in NE Texas in adults in 2014 - 23.4% compared to 14.5% in Texas overall

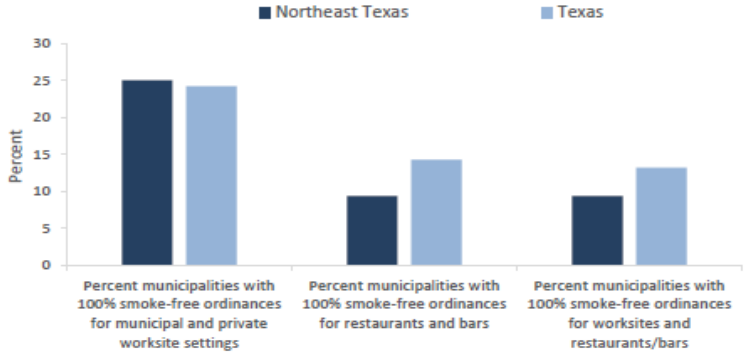
Figure 96. Age-Adjusted Prevalence of Current Smoking among Adults (2014)



Data source: Behavioral Risk Factor Surveillance System (BRFSS), Center for Health Statistics, Texas Department of State Health Services. Error bars indicate 95% confidence intervals.

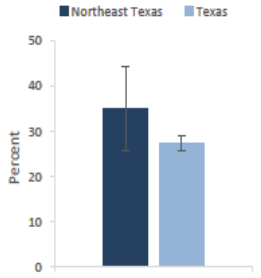
100% Smoke-free ordinance private worksites/ Restaurants-bars/ Worksites and Restaurants and bars

Figure 97. Percent of Municipalities with 100% Smoke-Free Ordinance Coverage by Settings: Northeast Texas and Texas (2014)



Data source: Texas Smoke-Free Ordinance Database, University of Houston.
All incorporated Texas municipalities with populations of greater than 5,000 residents are included. Details on the methodology and data by municipality can be found at: http://shsordinances.uh.edu/

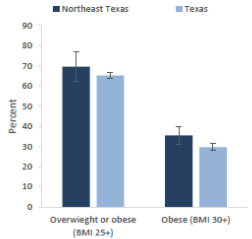
Figure 98. Age-Adjusted Prevalence of Adults Reporting No Past-Month Leisure Time Physical Activity (2014)



Physical Inactivity

Data source: Behavioral Risk Factor Surveillance System (BRFSS), Center for Health Statistics, Texas Department of State Health Services. Error bars indicate 95% confidence intervals.

Figure 100. Age-Adjusted Prevalence of Overweight and Obesity among Adults: Northeast Texas and Texas (2014)



Obesity

Data source: Behavioral Risk Factor Surveillance System (BRFSS), Center for Health Statistics, Texas Department of State Health

Interventions for promoting healthy lifestyle changes

Health Behavior	Individual/Provider	Population Level
Tobacco	Education, Counseling Medication	Media/Education Economic Incentives (taxes) Worksite wellness Community(quit lines, counseling, retail) Package Labeling Restrictions on use-location / Advertising
Physical Inactivity	Education, Counseling Pedometer, Step counting, Tracking	Prompts for use of stairs Incentives for use of active commuting Schools – Formal PE, trained teachers, rec space, equipment, playgrounds Worksite wellness, stairway access, fitness centers Local/Community – rec spaces/facilities, sidewalks, traffic safety, walkability
Diet	Tracking/apps (modest effect), Education, Counseling, Healthier choices	Farming legislation, food taxation Schools – healthier lunches and snacks Less salt, sugar, and unhealthy fats in foods Improved labeling and mandated nutrition facts Worksite wellness and nutrition. More supermarkets Restrictions on Ads for less healthful foods to kids/package promotions

QUESTIONS?

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